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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
08/974,545	11/19/1997	CHRISTOPHER B. FARMER	2207/4641	8354

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1500 K STREET, N.W., SUITE 700
WASHINGTON, DC 20005

EXAMINER

LEA EDMONDS, LISA S

ART UNIT	PAPER NUMBER
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2835

DATE MAILED: 04/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

08/974,545

Applicant(s)

FARMER, CHRISTOPHER B.

Examiner

Lisa Lea-Edmonds

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 15 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-18 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-18 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 November 1997 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Arguments

1. In view of the Reply Brief filed on 10/05/01, PROSECUTION IS HEREBY REOPENED. New grounds of rejection are set forth below.

To avoid abandonment of the application, appellant must exercise one of the following two options:

(1) file a reply under 37 CFR 1.111 (if this Office action is non-final) or a reply under 37 CFR 1.113 (if this Office action is final); or,

(2) request reinstatement of the appeal.

If reinstatement of the appeal is requested, such request must be accompanied by a supplemental appeal brief, but no new amendments, affidavits (37 CFR 1.130, 1.131 or 1.132) or other evidence are permitted. See 37 CFR 1.193(b)(2).

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the processor heat sink, the heat sink connector, and the lock comprising a clear plate must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Sangveraphunsiri (5530620). With respect to the method claims 16 and 17, Sangveraphunsiri teaches, the method steps of mounting a cartridge processor (520) having an edge connector on a motherboard (104) comprising: inserting the edge connector of said processor (520) in a connector (548') on said motherboard (104), said processor (520) having an orientation parallel to and displaced from said motherboard (104), wherein in said inserting step, said processor is inserted in said motherboard (104) in a first direction, further comprising: restraining said processor (520) from movement in directions mutually perpendicular to said first direction as claimed (see for example figures 21 and 22).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1, 2, 4, 5, 12, 14, and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buras, Jr. et al. (5559672) in view of Anderson (5898869). With

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respect to claims 1, 2, and 4, Buras, Jr. et al. teaches a mount (40) to receive a cartridge (PCMCIA 30, 32) having an edge connector, comprising a motherboard connector (44) to be mounted on a motherboard (42) to receive said edge connector in an orientation parallel to and displaced from said motherboard, wherein the mount (40) further comprises guides (40, 46) to restrain movement, wherein the mount (40) further comprises a case (12) surrounding said motherboard (42), said case (12) having a slot (24) through which said connector can be inserted into said receiving slot (24) without removing said case (12), wherein said case (12) has an interior side and an exterior side, and wherein said cartridge (30, 32) is visible from said exterior side (see for example column 7 lines 23-26). With respect to claim 12, Buras, Jr. et al. teaches a mount (40), comprising a motherboard (42); a receiving slot (24) connected to said motherboard (42) and configured to receive a connector; guides (40, 46) for guiding said connector into said receiving slot (24), wherein a cartridge (30, 32) is parallel to and displaced from said motherboard (42) after said connector is inserted into said receiving slot (24). With respect to claim 14, Buras, Jr. et al. teaches a mount (40), comprising a motherboard (42); a single edge connector cartridge having a connector, a receiving slot (24) connected to said motherboard (42) and configured to receive said connector; guides (40, 46) for guiding said connector into said receiving slot (24), wherein a cartridge (30, 32) is parallel to and displaced from said motherboard (42) after said connector is inserted into said receiving slot (24) as claimed (see for example figures 1-4). With respect to claim 18, Buras, Jr. et al. teaches a horizontal mount (40), comprising guides (40, 46) to guide a connector into a receiving slot (24) on a

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motherboard (42); and a single edge connector cartridge (30, 32) having a connector coupled to said motherboard (42) in a direction parallel to and displaced from said motherboard (42) as claimed (see for example figures 1-4). However, Buras, Jr. et al. fail to teach and/or suggest the cartridge (30, 32) being a cartridge processor and/or a processor. Anderson (5898869) is relied upon solely for teaching a PCMCIA card that includes a processor (see for example line 1 of the abstract). It would have been obvious to one of ordinary skill in the art at the time the invention was made for the cartridge (PCMCIA 30, 32) of Bauras Jr. et al. to be a cartridge processor and/or a processor as taught by Anderson to expand the computer processing capabilities.

6. Claims 3, 13 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buras, Jr. et al. (5559672) in view of Anderson (5898869) as applied to the claims above, and further in view of Hyde et al. (5751514). With respect to claims 3, 13 and 15, the apparatus of Buras, Jr. et al. in view of Anderson, teaches the invention set forth in claims 1, 2, 4, 5, 12, 14, 18 (see above), wherein said guides (40, 46) comprises a pair of guide slots (62) attached to said motherboard (42) as claimed. However, Buras, Jr. et al. in view of Anderson lacks a clear teaching of the guides (40, 46) comprising a pair of guide rails attached to said processor (30, 32) as claimed. Hyde et al. is relied upon solely for teaching a PCMCIA card that includes rails (see for example column 10 lines 3-6). It would have been obvious to one of ordinary skill in the art at the time the invention was made for the cartridge processor (PCMCIA 30, 32) of Bauras Jr. et al. in view of Anderson to include rails for compatibility with current conventional PCMCIA slots.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buras, Jr. et al. (5559672) in view of Anderson (5898869) as applied to claims 1, 2, 4, 5, 12, 14, and 18 above, and further in view of Pierson et al. (5889654). With respect to claim 6, the apparatus of Buras, Jr. et al. in view of Anderson, teaches the invention set forth in claims 1, 2, 4, 5, 12, 14, 18 (see above), lacks a clear teaching of the processor (30, 32) including a heat sink as claimed. Pierson et al. is relied upon solely for teaching a PCMCIA card (20) including a heat sink (34) as claimed (see for example column 3 lines 13-18). It would have been obvious to one of ordinary skill in the art at the time the invention was made for the cartridge processor (PCMCIA 30, 32) of Bauras Jr. et al. in view of Anderson to include a heat sink to aid in cooling.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buras, Jr. et al. (5559672) in view of Anderson (5898869) as applied to claims 1, 2, 4, 5, 12, 14, and 18 above, and further in view of Feightner et al. (5748446). With respect to claim 7, the apparatus of Buras, Jr. et al. in view of Anderson, teaches the invention set forth in claims 1, 2, 4, 5, 12, 14, 18 (see above), lacks a clear teaching of the motherboard (42) including a heat sink, further comprising a heat sink connector as claimed. Feightner et al. is relied upon solely for teaching of a motherboard (50) including a heat sink (34), further comprising a heat sink connector (36) for connecting said heat sink (34) to said processor (40) as claimed (see for example figure 11). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Feightner et al. into the apparatus of Bauras Jr. et al. in view of Anderson to aid in cooling.

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9. Claims 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Buras, Jr. et al. (5559672) in view of Anderson (5898869) as applied to claims 1, 2, 4, 5, 12, 14, and 18 above, and further in view of Karidi et al. (5793607). With respect to claims 8 and 10, the apparatus of Buras, Jr. et al. in view of Anderson, teaches the invention set forth in claims 1, 2, 4, 5, 12, 14, 18 (see above). However, the apparatus of Buras, Jr. et al. in view of Anderson lacks a clear teaching of a lock as claimed. Karidis et al. is relied upon solely for teaching of a lock and/or spring lock as claimed (see for example any figures 1-10). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Karidis et al. into the apparatus of Bauras Jr. et al. in view of Anderson to reduce unwanted removal and/or deter theft of PC cards. With respect to claim 9, Bauras Jr. et al. in view of Anderson further in view of Karidis et al. teaches the invention set forth in claim 8 (see above), However, Karidis et al. lacks a clear teaching of the lock comprising teeth as claimed. It would have been obvious to one of ordinary skill in the art at the time the invention was made for the lock of Karidis et al. to comprise teeth as there is nothing non-obvious over the type of lock being used so long as it performs the same function, which is to secure one device to another.

10. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Buras, Jr. et al. (5559672) in view of Anderson (5898869) further in view of Karidi et al. (5793607), as applied to claim 8 above, and further in view of Sangverphunsiri (5530620). With respect to claim 11, the apparatus of Buras, Jr. et al. in view of Anderson, in view of Karidis et al. teaches the invention set forth in claims 1 and 8 (see

above). However, the apparatus of Buras, Jr. et al. in view of Anderson, in view of Karidis et al. lacks a clear teaching of the lock comprising a clear plate as claimed. Sangveraphunsiri is relied upon solely for teaching of a lock comprising a plate (510) as claimed (see for example figures 12-20). It would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Sangverphunsiri into the apparatus of Bauras Jr. et al. in view of Anderson in view of Karidis et al. to reduce unwanted dirt and dust from entering. With respect to the plate (510) being clear, Sangverphunsiri is silent on the matter, However, it would have been obvious to one of ordinary skill in the art at the time the invention was made for the cover (510) to be clear to allow a user to view the processor and/or the lock structure.


Conclusion

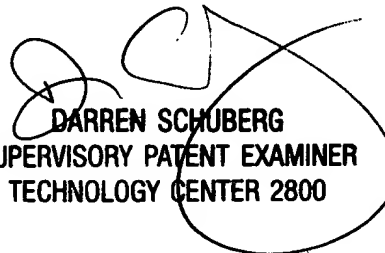
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lisa Lea-Edmonds whose telephone number is 571-272-0043. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg can be reached on (571) 272-2800, ext 35. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


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